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CLAIMS

1. A method for measuring tissue edema, *characterised by*

5 - an electromagnetic probe (24) is placed on the skin during the measurement, and the capacitance of the probe is proportional to the dielectric constant of the skin and the subcutaneous fat tissue, which is further proportional to the water content of the skin, and that

- the edema is scored by measuring the capacitance of the electromagnetic probe, so called open-ended coaxial cable, at a high frequency, approximately 20-500 MHz.

10 2. A method according to claim 1, *characterised* in that the measurement is made manually and takes only a few seconds.

3. A method according to claim 1, *characterised* in that for the measurement the probe is secured on the skin by an attachment, such as strap-like attachment, for a long time, for instance hours or days, in which case the edema can be monitored continuously.

15 4. A method according to any of the claims 1-3, *characterised* in that the device operates only on a single precisely set frequency.

20 5. A method according to any of the claims 1-4, *characterised* in that edema of the uppermost layers of the skin is measured using a frequency of approximately 20-50 MHz, in which case the electric field is concentrated in the uppermost layers of the skin.

6. A method according to any of the claims 1-4, *characterised* in that the edema of deep skin layers and the underlying subcutaneous fat is measured using a frequency of approximately 50-500 MHz, in which case the electric field penetrates deeply into the skin and the underlying subcutaneous fat.

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